

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

Gold Standard Bakery  
Attn: James Carr  
3700 South Kedzie Avenue  
Chicago, Illinois 60632-2768

Application No.: 98080064

I.D. No.: 031600GES

Applicant's Designation: BAKERY

Date Received: May 2, 2005

Subject: Bakery

Date Issued:

Expiration Date: January 24, 2012

Location: 3700 South Kedzie Avenue, Chicago, Illinois 60632-2768

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of Two Direct-Fired Tunnel Baking Ovens (Henry HM3-100 and Baker-Perkins 100-Foot) pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
  - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for VOM). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
  - ii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2a. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 Ill. Adm. Code 212.122, pursuant to 35 Ill. Adm. Code 212.123(a), except as allowed by 35 Ill. Adm. Code 212.123(b) and 212.124.
  - b. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 Ill. Adm. Code 212.301 and 212.314.

- c. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.
- d. All normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312.
- e. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.
- f. Pursuant to 35 Ill. Adm. Code 212.310, as a minimum the operating program shall include the following:
  - i. The name and address of the source;
  - ii. The name and address of the owner or operator responsible for execution of the operating program;
  - iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;
  - iv. Location of unloading and transporting operations with pollution control equipment;
  - v. A detailed description of the best management practices utilized to achieve compliance with this Subpart, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;
  - vi. Estimated frequency of application of dust suppressants by location of materials; and
  - vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

- g. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 Ill. Adm. Code 212.321.
- 3. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.
- 4a. Operation and emissions from yeast containing production shall not exceed the following limits:

Yeast Containing Production Rate		Volatile Organic Material Emissions	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
1,667	20,000	2.03	24.4

- b. These limits define the potential emissions of VOM from baking equipment and are based on the actual emissions determined from the maximum production capacity.
- i. For bread and croissant production, the VOM emissions shall be calculated using the following formula (ACT EPA 453/R-92-017 p. 2-19):

$$EF = 0.95Y_i + 0.19t_i - 0.51S - 0.86t_s + 1.90$$

where;

EF - Emission Factor (pounds of VOM emissions per ton of baked product);

Y<sub>i</sub> - Initial Yeast Weight Percentage;

t<sub>i</sub> - Total Fermentation Time (hours);

S - Second Yeast Weight Percentage (if applicable);

t<sub>s</sub> - Fermentation Time for Second Yeast (hours) (if applicable).

- ii. For Danish production, the VOM emissions shall be calculated using the following formula (ACT EPA 453/R-92-017 p. 1-4):

$$EtOH = 0.40425 + 0.444585Y_t$$

where;

EtOH - Emission Factor (pounds of VOM emissions per ton of baked product);

Y - Initial Yeast Weight Percentage;

t - Total Fermentation Time (hours);

- 5a. Natural gas shall be the only fuel fired in combustion equipment.
- b. Emissions and operation of all fuel combustion equipment shall not exceed the following limits:

<u>Gas Usage</u>		<u>Pollutant</u>	<u>Emission</u>	<u>Emissions</u>	
<u>(10<sup>6</sup> scf/Mo)</u>	<u>(10<sup>6</sup> scf/Yr)</u>		<u>Factor</u>	<u>(T/Mo)</u>	<u>T/Yr)</u>
9.5	114	Volatile Organic Material (VOM)	5.28	0.025	0.30
		Nitrogen Oxides (NO <sub>x</sub> )	100	0.48	5.70
		Carbon Monoxide (CO)	84	0.40	4.79
		Particulate Matter (PM)	13.7	0.065	0.78
		Sulfur Dioxide (SO <sub>2</sub> )	0.6	0.003	0.03

- c. These limits define the potential emissions of VOM from natural gas combustion and are based on the actual emissions determined from maximum production capacity and standard emission factors.
- 6. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus preceding 11 months (running 12 month total).
- 7a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
  - i. Amount of each product baked (tons/month, tons/year);
  - ii. Weight Percentage of each product's yeast (initial and second);
  - iii. Fermentation time (initial and second, in hours);
  - iv. VOM emissions, with supporting calculations (tons/month, tons/year);
  - v. Natural gas consumption (10<sup>6</sup> scf/month, 10<sup>6</sup> scf/year); and
  - vi. Monthly and annual emissions of CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM from the source with supporting calculations (tons/month and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records

retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

8. If there is an exceedance of or deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or deviation and efforts to reduce emissions and future occurrences.

9. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control - Regional Office  
9511 West Harrison  
Des Plaines, Illinois 60016

Please note that this permit is revised to incorporate the operating of one bakery oven as described in Construction Permit 06100067.

If you have any questions on this, please call John Blazis at 217/782-2113.

Edwin C. Bakowski, P.E.  
Acting Manager, Permit Section  
Division of Air Pollution Control

ECB:JPB:cjc

cc: Illinois EPA, FOS Region 1  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the bakery operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels (e.g., 100 tons per year of VOM) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

<u>Emission Unit</u>	E M I S S I O N S (Tons/Year)						Single <u>HAP</u>	Total <u>HAPs</u>
	<u>CO</u>	<u>NO<sub>x</sub></u>	<u>PM</u>	<u>SO<sub>2</sub></u>	<u>VOM</u>			
Yeast Containing Production	-----	-----	-----	-----	24.40	-----	-----	
Fuel Combustion	<u>4.79</u>	<u>5.70</u>	<u>0.78</u>	<u>0.03</u>	<u>0.30</u>			
Totals	<u>4.79</u>	<u>5.70</u>	<u>0.78</u>	<u>0.03</u>	<u>24.70</u>	< 10	< 25	